WHAT IS CLAIMED IS:

1. A method for constructing a check dam using a gear-type block, comprising the steps of:

(a) depositing a bottom mat for protecting weak ground on a prepared river bed of a river or a valley where the check dam is to be constructed such that said mat is spread over the area broader than designed area of a bottom of the dam structure to be constructed;

(b) piling a plurality of gear-type blocks in a form of a pyramid on said river bed where said bottom mat is deposited, each of said gear-type blocks including an upper part and an lower part having projections and a groove thereon respectively, said upper and lower parts being provided for engaging one of said piled blocks with another block when the piling step is performed, each of said gear-type blocks including a middle part having a through hole of a predetermined dimension formed therein, each of said gear-type blocks including four lateral parts each having a ring for connecting adjacent blocks formed thereon; and

(c) depositing a plurality of native rock-type blocks in the form of a block mattress on said bottom mat at upper and lower streams of the lower end of said dam structure by connecting said native rock-type blocks together with said rings, each of said native rock-type blocks including irregular projections formed diagonally thereon, gaps defined by said projections in which soil is to be filled, and rings provided diagonally at the corners for connecting adjacent blocks.

2. The method as clamed in claim 1, wherein said adjacent blocks are connected together by fixing U-shaped bolts to said rings formed at the lateral parts of each block when said gear-type blocks are piled up in the form of a pyramid at the step

(b).

3. The method as clamed in claim 1, wherein said dam structure is constructed in the form of a pyramid such that a middle part of the structure is arranged at the level lower than either side part of the structure adjacent to either bank of the valley.

4. A method for constructing a fire prevention dam using a gear-type block, comprising the steps of:

(a) depositing a mat for containing water on a prepared river bed of a river or a valley where the fire prevention dam is to be constructed such that said mat is spread over the area broader than designed area of a bottom of the dam structure to be constructed;

(b) preparing a first vertical pileup of a plurality of gear-type blocks on said river bed where said mat for containing water is deposited, each of said gear-type blocks including an upper part and an lower part having projections and a groove thereon respectively, said upper and lower parts being provided for engaging one of said piled blocks with another block when the piling step is performed, each of said gear-type blocks including a middle part having a through hole of a predetermined dimension formed therein, each of said gear-type blocks including four lateral parts each having a ring for connecting adjacent blocks formed thereon;

(c) depositing a mat for containing water at the outer surface of the containing water along said first vertical pileup of the structure;

(d) providing a second vertical pileup of a plurality of gear-type blocks same as said gear-type blocks used in the step (b) at the outer surface of the containing water along said first vertical pileup of the structure where said mat for containing water is deposited; and

(e) arranging said gear-type blocks in the form of a block mattress on said mat

for containing water at upper and lower streams of the lower end of said dam structure obtained from said first and second vertical pileup of the structure by connecting said gear-type blocks together with said rings.

5. The method as clamed in claim 4, wherein said second vertical pileup of the gear-type blocks is provided in the step (d) such that a pileup surface at the lower stream of the structure is inclined at a predetermined angle.